

**IN THE CLAIMS:**

Please amend claims 22, 28, 33, and 38-42 and as follows. Please add new claims 43-46 as follows.

Claims 1-21. (Cancelled).

22. (Currently Amended) A method ~~for~~ comprising:  
generating unique internet protocol address from the geographical location data,  
~~in which~~ wherein the internet protocol address has a global prefix portion and a  
local suffix ~~suffice~~ portion, and

wherein the geographical location information is coded in the suffix part of the  
address.

23. (Previously Presented) A method according to claim 22, wherein the  
geographical location is a three dimensional coordinate.

24. (Previously Presented) A method according to claim 22, wherein the  
geographical location information is a two dimensional coordinate.

25. (Previously Presented) A method according to claim 22, wherein the  
geographical location information includes additional information.

26. (Previously Presented) A method according to claim 25, wherein the  
additional information is node specific information such as terminal number, node name,  
node layer information, street address, serial number, color or weight.

27. (Previously Presented) A method according to claim 22, wherein the address based on the geographic location information assigned to a mobile device is updated when the mobile device moves and said new address is informed to the register that controls the location of said mobile device.

28. (Currently Amended) A method according to claim 22, wherein the address assigned to a mobile device ~~consist of~~ comprises the device number and geographical location information of the router to which the mobile device is connected to.

29. (Previously Presented) A method according to claim 22, wherein the geographical location information is automatically detected.

30. (Previously Presented) A method according to claim 22, wherein the geographical information is manually entered.

31. (Previously Presented) A method according to claim 22, wherein the addressing of subnets of the network is based on the geographic location of the routers.

32. (Previously Presented) A method according to claim 22, wherein the addresses are used to improve the network performance by using the geographic location information in directing the radio signal to destination when radios are used in physical layer.

33. (Currently Amended) A router for routing internet protocol packets in which the unique address is based on geographical location information and has a global prefix portion and a local suffix portion, wherein the router is configured to harness system

harnesses the geographic location information coded to the ~~suffice~~ suffix portion of the address in routing packets to the destination nodes located in the subnetwork.

34. (Previously Presented) A router according to claim 33, wherein the geographic location information is a three dimensional coordinate.

35. (Previously Presented) A router according to claim 33, wherein the geographic location information is a two dimensional coordinate.

36. (Previously Presented) A router according to claim 33, wherein the geographical location information includes additional information.

37. (Previously Presented) A router according to claim 36, wherein the additional information is node specific information such as terminal number, node name, street address, serial number, color or weight.

38. (Currently Amended) A router according to claim 33, wherein the router is ~~arranged~~ configured to update the address assigned to a mobile device when the mobile device moves.

39. (Currently Amended) A router according to claim 33, wherein the router is ~~arranged~~ configured to assign to a mobile device an address which consists of a device number and a geographical location information of the router to which the mobile device is connected to.

40. (Currently Amended) A router according to claim 33, wherein the router is ~~arranged~~ configured to query the geographic location information from the client attached to the network.

41. (Currently Amended) A router according to claim 33, wherein the router is ~~arranged~~ configured to assign the geographic location information and terminal device number to client attached to the network.

42. (Currently Amended) A router according to claim 33, wherein the router is ~~arranged~~ configured to utilize the geographic location information in directing the radio signal to destination when radios are used in physical layer.

43. (New) An apparatus comprising:  
generating means for generating unique internet protocol address from the geographical location data,

wherein the internet protocol address has a global prefix portion and a local suffix portion, and

wherein the geographical location information is coded in the suffix part of the address.

44. (New) A unique internet protocol address comprising:  
a global prefix portion and a local suffix portion,  
wherein the unique internet protocol address is generated from geographical location data of one of a node and a router connected to said node, and

wherein said geographical location information is coded in said suffix part of said unique internet protocol address.

45. (New) A routing component for routing internet protocol packets, wherein a unique internet protocol address is based on geographical location information of one of

said routing component and a node connected to said routing component, and wherein said unique internet protocol address has a global prefix portion and a local suffix portion, wherein said routing component is configured to utilize said geographic location information, said geographic location information being coded to said suffix portion of said unique internet protocol address, in routing packets to destination nodes located in a subnetwork.

46. (New) A system for routing internet protocol packets, said system comprising:  
a router configured to route data packets between internet and a subnetwork, said subnetwork comprising a group of nodes,

wherein a unique internet protocol address is based on geographical location information of one of said router and one node of said group of nodes,

wherein said unique internet protocol address has a global prefix portion and a local suffix portion, said router being configured to utilize said geographic location information, the geographic location information being coded to said suffix portion of said unique internet protocol address, in routing packets to destination nodes located in said subnetwork.